Scheduling Coordinator Update

BPA Talking Points

During February, BPA offered its full service power customers briefings on the scheduling coordinator role in the proposed RTO West. These talking points provide answers to many of the questions raised during those briefings.

Background

On March 29, 2002, a detailed description of the Stage 2 RTO West (a regional transmission organization for the Pacific Northwest) proposal was submitted to the Federal Energy Regulatory Commission for its approval. The proposal envisions that RTO West will transact business only with entities it has certified as being qualified scheduling coordinators. Transmission customers will need to schedule their transmission use through a scheduling coordinator.

BPA expects to fulfill this role for all its transmission customers who do not convert their BPA transmission service to RTO West service. BPA will also offer scheduling coordination service to full service and simple partial power customers that do convert. The responsibilities of scheduling coordinators will be controlled by certain features (for example, congestion management and authority to schedule directly with RTO West), and BPA has not yet decided what scheduling coordinator services it will offer to other customers who convert to RTO West transmission service. However, building on the work already initiated with customers to date, BPA will be clarifying in the coming months the scheduling coordinator services it will offer to customers.

Messages

- The responsibilities of the scheduling coordinator will evolve as RTO West evolves.

- BPA will pass through to its customers the incremental costs the agency incurs in performing scheduling coordinator services. These costs will include both direct costs paid to RTO West and BPA's administrative costs.

- To the extent possible, BPA plans to use existing systems and staff to meet the demands of the scheduling coordinator role.

- BPA will be seeking customers' input in developing its scheduling coordinator service.

- BPA's future organizational structure may be influenced by the scope and characteristics of its scheduling coordinator function. How BPA sets up the scheduling coordinator role will be an important consideration in determining how BPA will organize itself after RTO West is operational.

Questions and answers

1. **How will congestion management charges be assigned to points of withdrawal if one is 1 megawatt and another is 20 MW and if the 1 MW is not the cause of the congestion and has stayed constant, but the 20-MW POW has increased over time?**

   Congestion charges will be based on (1) the size of load and (2) the point of injection (POI)/point of withdrawal (POW) "path." If two loads have the same path and differ only in size, the congestion charges will vary in direct proportion to load – a 1-MW load will have one-twentieth the charge of a 20-MW load. If the two loads are at the same POW but have different POIs, their congestion charges could differ because the differing delivery paths have different congestion impacts.

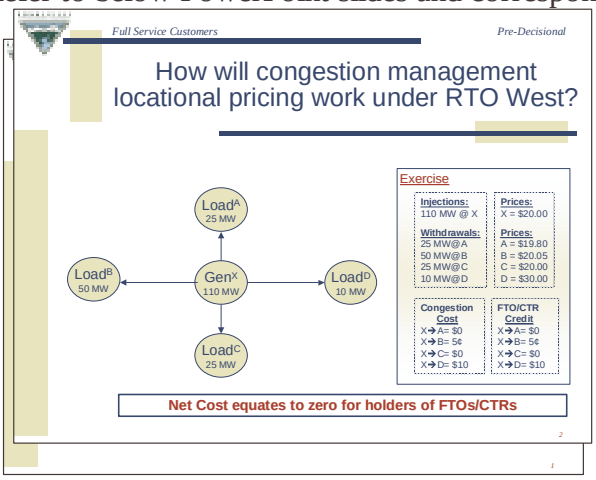
   An existing load's "right" to avoid congestion charges is recognized to the extent its catalogued transmission rights (CTRs) serve as a credit against all congestion charges on a POI/POW defined in existing contracts. In this example the 1-MW load covered by a CTR would not be subject to congestion charges for the duration of its existing transmission contract. The 20-MW load and its share of load growth at the POW will also be spared congestion costs *if* the load growth is covered under existing contracts. If service occurs that is not covered by existing contracts, it will be assessed congestion charges and will have to either pay those charges or purchase financial transmission options (FTOs) to hedge those charges.

2. **Please develop a map that indicates where congestion exists on the BPA and other utilities' systems. Is it only north of Everett and in southeast Idaho?**

   We cannot make an educated guess regarding the major congestion points on systems outside of BPA. To observe current major congestion points on BPA's system, refer to the following hyperlink NW Constrained Paths. The geographic boundaries outlined on this map are not reflective of the boundaries defined by RTO West.

3. **Please include a graphic detailing when congestion charges are likely to occur and why?**

   Refer to below PowerPoint slides and corresponding speaker notes.



- Main Point: If you have Catalogued Transmission Rights (CTRs) or the appropriate Financial Transmission Options (FTOs), then you're insulated from Congestion Costs.
- Prices will vary most in the areas where there are significant transmission constraints. Where there are no transmission constraints prices will be roughly or exactly equal.
- In the above example, the SC forecasts the loads correctly at 110 MW and schedules them appropriately to withdrawal points A, B C, & D.
- The RTO calculates congestion costs between those points. If congestion is low or zero the costs will be low (A, B & C). If there is significant congestion the costs will be higher (D).
- If the SC has CTRs that cover these injections/withdrawals or the exact set of FTOs needed to cover them, it receives a credit for the congestion costs making the net cost of congestion zero.

4. **Is BPA's Power Business Line is going to run a mini 7(i) process to establish a new delivery charge when TBL's current charge expires? At this point it appears PBL may do the mini 7(i) once it sees what TBL is going to do on the delivery charge.**

   Under the TBL settlement for the FY 2002-2003 rate period, parties agreed the PBL could use the TBL delivery charge rate for the general transfer agreement delivery charge for the FY 2002-2003 period. PBL expects to have a mini 7(i) to establish the general transfer agreement delivery charge rate for the post-FY 2003 period.

5. **What facilities will BPA put into the RTO? And what facilities will the investor-owned utilities include? I'm concerned about the status of general transfer agreements. Going to an RTO should not disadvantage transfer customers.**

   BPA's position is that all facilities (except delivery facilities 34.5 kilovolts or below) used to serve GTA and GTA-type customers should be included in the list of RTO facilities.

6. **When a customer's existing transmission contract expires, what is its right(s) for conversion?**

   Many of the details of the congestion management model have yet to be worked out. At this stage we know the following:

   - Under the RTO West proposal, rollover rights would continue for contracts necessary to serve load. At expiration, customers with such contracts would either rollover their contracts or convert to RTO West service.
   - The RTO West proposal would require each participating transmission owner (PTO) to modify its open access transmission tariff to change rollover rights in other contracts to a one-time customer election to extend the contract's term. Upon expiration of these contracts, the customer moves to taking RTO West service. Thereafter, if the customer wants to be protected from congestion costs, it needs to purchase financial transmission rights (FTOs). If it doesn't want to be protected from congestion costs, it doesn't need to do anything other than submit schedules on the preschedule day.

7. **Will TBL consider signing 30-year contracts during the next year or rate case if I only have a five-year contract now?**

   A customer that currently holds a point-to-point or network transmission agreement may request a service extension by making a new application for service for the additional period of time. The TBL will treat this request as a new request for service. If transmission is available, an amended or new service agreement will be offered. If transmission is not available, the TBL will offer a facilities study to determine any necessary transmission upgrades needed in order to provide service. In previous transmission service agreements, the TBL has limited the term of service to no more than 30 years.

8. If a utility is forced to convert to the RTO, what rights will it have?

The construct under RTO West is that holders of transmission contracts will not be forced to convert but will have the option to convert and, in fact, may receive incentives to do so. Conversion to RTO service, in this sense, means that the customer will voluntarily suspend its pre-existing contract rights and receive new rights called financial transmission options (FTOs)[1]. FTOs provide a financial hedge against congestion costs for any schedule (the actual transmission use does not need to match the FTO, but the amount of the congestion hedge is based on the FTO), and they can be transferred or resold in the secondary FTO market.

9. Will the Catalogued Transmission Rights (CTRs) capture only what exists in current contracts or will the CTRs also include rights that have been requested but not yet accepted or agreed to?

Catalogue transmission rights will reflect only rights provided under an existing transmission agreement. Requests that would require an amendment to the contract will not be covered.

Issues like load growth, specified through a contract or as a load service obligation; customers exercising existing contract rights to change their transmission rights like Points of Delivery (PODs) or Points of Receipt (PORs); or changes in transmission capacity may require a participating transmission organization to update its catalogue. Realistically, these updates will not occur more than bi-annually or annually. An update to the catalogue may also be triggered if a customer elects to convert its catalogued transmission rights to FTOs. However, regardless of changes to the catalogue, RTO West will also be able to re-evaluate the catalogue annually.

10. If a customer loses large loads and its requirement drops below the established forecast, does it have the right and opportunity to sell excess transmission capacity rights and benefits?

The answer depends on the specific transmission contract being used. In general, NT service rights are based on the size of the load, so there would be no excess capacity rights to sell. PTP service is based on Reserved Capacity and does allow for resale of unused capacity. RTO West would place no additional restrictions on nonconverted contracts, so any rights to resell transmission capacity granted by the nonconverted contracts would likely continue under RTO West. If a customer converted to, or purchased new, RTO West service, the ability to trade unused capacity would depend on the type of service selected: (i) conversion to or purchase of financial transmission options would likely provide expansive trading rights usable over the entire system; and (ii) conversion to catalogued transmission rights would likely limit use of the traded rights to the original injection and withdrawal points.

[1] Customers would also have a limited opportunity to actually convert their contract rights to Catalogued Transmission Rights.

11. Will BPA be requiring real-time meters at all points of withdrawal or is BPA considering real-time metering at only some POWs? Who will pay for the metering?

Metering requirements have not yet been defined in the RTO West effort. However, sometime in the future, BPA expects a section of the RTO West tariff will be dedicated to metering requirements.

BPA is undertaking a metering project to examine metering needs not just based on RTO West but based on many factors that are pushing the need for improving quality meter information. The RTO commercial liability group recommended the ability to quickly determine how much energy imbalance a scheduling coordinator has used. The general idea is that scheduling coordinators should be responsible for providing the metering capability to measure imbalance energy for each scheduling coordinator on a daily or weekly basis. Where scheduling coordinators do not have adequate metering in place, some combination of constraints in the credit standards will likely be considered. Examples include:

- Limitations on the involvement of scheduling coordinators without sufficient metering capabilities;
- Pooling scheduling coordinators without sufficient metering capabilities to share in the cost of the credit risk with other similarly situated scheduling coordinators; and
- Increased collateral deposits from scheduling coordinators without sufficient metering capabilities.

BPA will need to make a policy decision regarding who pays for metering costs under specific circumstances. That decision has not been made yet, and will not be made without consulting BPA customers.

12. Will BPA be forecasting individual points of withdrawal in the future? It would appear that this will be necessary in the scheduling coordinator/RTO world.

BPA expects that forecasting will become more important as the system becomes more constrained; therefore, we are working to upgrade our forecasting capability. There will likely be areas on the system where the loads are fairly predictable and prices are stable and other areas where the risk posed by forecast error is high. Detailed forecast efforts will concentrate on those areas with the greatest exposure and those cases may well require drilling down to individual points of delivery. BPA will need to work closely with improving its ability to forecast customer load.

13. How tight of a load forecast will be requested of the customers — hourly, daily, monthly or annual?

It is unclear at this time what the requirements for customer forecasting might be. The RTO West scheduling and settlement standards have not yet been determined and the costs and risks are hard to quantify without further detail on the RTO West design. Additionally, customer requirements will be influenced by the power and transmission service you take from BPA. BPA expects to have a dialogue with customers as we are developing the scheduling coordinator function to determine how forecasting roles should be shared between BPA and its customers.

14. I'm concerned about being penalized for something the utility has no control over. Is there a way to mitigate penalties? Would the schedules/forecasts/basis for penalties be based on PODs or total utility load or would it be regionalized?

The concept of what defines an acceptable level of energy imbalance has not been locked down. In general, energy imbalance use is charged to a customer based solely on the charge from the party that generates the energy. In other words, there is no penalty associated with the usage. However, at some point, defined as outside the "bandwidth," the use of energy imbalance becomes excessive (that is, the entity is relying on imbalance energy to serve its load) and should be discouraged. For energy imbalance use outside of the bandwidth, an additional charge of some percentage of the cost of the energy imbalance will be applied to discourage use of the energy imbalance market for load service. At this point the basis for penalties has not been decided (this will likely be addressed in the RTO tariff), but, unlike the imbalance market itself, which may require tracking imbalances at low levels (for example, PODs) for operational reasons, penalties were conceived as financial liability protection for the RTO. Given this, BPA expects that the RTO would apply penalties on a scheduling coordinator's portfolio of imbalances rather than individually assessing delivery points.

To minimize the chances of going outside of the energy imbalance bandwidth, a number of steps can be taken. They fall into two categories — 1) implement tools to improve forecasting of load (and, if relevant, generation) and 2) self-track (for example, install metering and communications to have generation follow loads automatically) or try to sell into the energy imbalance market so that you will be both purchasing and selling in the same hour to cover at least a portion of the energy imbalance that will be purchased. If the customer continues to purchase power and/or take pre-existing transmission service from Bonneville, then the choice of transmission and power products will influence both the role that BPA plays in managing this exposure and the rate design through which the customer may see these costs.

15. How will the bandwidth on energy imbalance work? Will energy imbalance be based on an hourly average or on instantaneous peak within the hour? The energy imbalance or scheduling coordinator service should not disadvantage customers that are unable to forecast loads that are dominated by irrigation pumping and weather-related load swings.

RTO energy imbalances are priced each period (hour or portion of an hour) and charged by the RTO to imbalance users. The RTO then pays the balancing energy suppliers based on the prices for that hour, or portion of hour, for the service they provided in keeping the system balanced. Because suppliers must be paid, in the RTO West model, there is not a bank in which imbalances are carried over and periodically cleared by energy returns. The full structure has not yet been developed so no decision has been made about the relevant period for imbalances (hourly, 10 minute or other), but BPA expects that the charge will be based on average energy over a defined period rather than on instantaneous peak.

16. Will BPA require an agreement or contract with customers to perform the scheduling coordinator service for them?

BPA is considering offering a "client" contract to customers to govern the relationship between BPA and those customers in scheduling transactions with RTO West. This agreement would establish BPA as the customer's scheduling coordinator with RTO West and would define the services to be offered, data required and other conditions associated with the service. For customers that do not convert their contract and are not executing new agreements with respect to the operation of RTO West, BPA expects to document the business practices by which it will continue service to its customer after RTO West begins operation.

17. Will the scheduling coordinator service be a function of the TBL or PBL?

Because RTO West is under development, much is unknown about the organizational needs of a scheduling coordinator. BPA's position with respect to forming an organizational structure conducive to scheduling coordinator services will rely on an analysis aimed at determining the optimal location and structure that balance organizational efficiency with customer satisfaction.

18. Who is performing the scheduling coordinator service right now, TBL or PBL?

Today, both PBL and TBL provide scheduling coordinator services. For example, PBL preschedules power to the control area and TBL preschedules transmission within the control area. (In the Pacific Northwest, the TBL and other utilities operate control areas.)

19. Who else besides BPA might offer scheduling coordinator service?

BPA expects some customers will seek RTO West certification to become scheduling coordinators. In addition, we expect other entities to become certified and offer scheduling coordinator services to BPA transmission customers. We hesitate to name specific organizations because our list would inevitably be inaccurate and incomplete.

20. How will the costs of updating the transmission system be spread?

It depends. (1) If the expansion is to provide reliable service to loads, the costs are allocated to the participating transmission owners based on the allocation of benefits to their loads. Once allocated to the owners, the costs are included in each PTO's company rates and rates for nonconverted contracts. (2) If the expansion is only to relieve congestion, costs will be borne by the entity that funds the expansion in return for the financial transmission options associated with the increase in capacity. (3) If the RTO arranges for an expansion because of market failure to mitigate chronic, significant, commercial congestion, the costs will be allocated based on the allocation of benefits.

How Bonneville spreads those costs assigned to BPA will be determined in future BPA rate cases.

21. Some public utilities provide transfer service to serve another public utility load. However, the transferring utility is responsible for reactive charges even though it is not causing the problem. How will the scheduling coordinator work in this situation?

As long as the contract is not converted to RTO service, the transmission contract holder would continue to pay the reactive charge.

22. What advantages might an individual utility get from joining an RTO?

The advantages and disadvantages of joining RTO West, as a transmission owner, depend on the specific circumstances of a utility so each utility must make its own assessment. For example, if the utility is FERC jurisdictional, one clear advantage is staying in compliance with FERC's agenda. Alternatively, utilities that currently have their own control area can assess the possible advantages of the efficiencies of turning that control area over to RTO West and not carrying the costs of continuing to maintain their own control area.

For a utility that does not own transmission, participating in RTO West essentially means converting its transmission contract to RTO West service and/or purchasing new service. This service will provide flexible use of the system, nonpancaked rates (at least for new service) and broad rights to trade FTOs. Whether the advantages are worth converting to RTO West transmission service depends on the transmission needs of the customer and the desirability of the RTO West transmission tariff versus the tariff of the transmission owner.

23. Why is an RTO needed in the Pacific Northwest?

If done right, an RTO could resolve existing or imminent transmission issues in the Northwest and enhance competition and lower power prices to customers. BPA is committed to participating in the development of the RTO proposal that responsibly meets regional needs and fits Northwest circumstances. For example, we are now faced with a transmission system that has not kept up with expanding power demands. RTO West will provide centralized planning and expansion to ensure a reliable integrated network both in the near and long term. From a political standpoint, there is national-level bipartisan support to move forward with RTO West. With or without BPA, the investor-owned utilities will move forward to develop an RTO. Again, our choice is to influence that proposal to create an RTO that best fits the region's needs. BPA has substantial safeguards that protect its statutory requirements, preserve fish obligations and maintain U.S. Army Corps of Engineers and Bureau of Reclamation interrelationships, among others. At the end of the day, the proposal must meet our principles – in particular to "provide sustainable benefits"— if BPA is to decide it will join RTO West.

24. How would utilities be handled if they have some PODs in the RTO's control area and some PODs outside the RTO's control area?

For customers that will be both inside and the outside the boundaries of RTO West, we expect that the external portion will be served in much the same way it is today (bilateral arrangements for service with the outside transmission provider/control area) and that arrangements to manage the control area "borders" will have to be replicated with RTO West.

25. How will additional costs of providing scheduling coordinator services be handled?

BPA is committed to keeping the costs of the scheduling coordinator service as low as possible. BPA will examine ways to carry out the analytical and administrative work in order to impose low costs on its scheduling coordinator clients. However, the most significant cost risks associated with the scheduling coordinator function are not the administrative costs but the congestion and ancillary cost risks that will be associated with operating in a congested transmission environment under RTO West. BPA needs to create a scheduling coordinator function that has the ability to manage those risks in a responsible manner. We expect there to be minor incremental costs associated with providing the scheduling coordinator service.

BPA has not yet decided on how the costs of the scheduling coordinator service will be allocated. Some costs could be spread across a large number of beneficiaries of the scheduling coordinator coordinator service while other costs could be directly assigned to individual clients. Pricing scheduling coordinator services will be discussed as BPA proceeds with the design of the scheduling coordinator services and in future rate cases.